Lindsey Lake Tanker Truck Spill - Shoreline Cleanup Assessment Technique Work Plan

February 18, 2019

Plan Purpose and Objectives

a. Purpose Shoreline Cleanup and Assessment Technique (SCAT) is a systematic method for surveying an affected shoreline after an oil spill. The SCAT approach uses standardized terminology to document shoreline oiling conditions. SCAT is designed to support decision-making for shoreline cleanup. It is flexible in its scale of surveys and in the detail of datasets collected. SCAT surveys begin early in the response to assess initial shoreline conditions, and ideally continue to work in advance of operational cleanup. Surveys continue during the response to verify shoreline oiling, cleanup effectiveness, and eventually, to conduct final evaluations of shorelines to ensure they meet cleanup endpoints.

This work plan has been developed to describe the process for initiating and implementing SCAT actions for shorelines impacted by the Lindsey Lake Tanker Truck Spill.

The SCAT process for this incident is intended to:

1. Systematically survey and document the area affected by oil to provide rapid and accurate geographic description of the shoreline oiling conditions and real-time issues or constraints;
2. Recommend treatment or cleanup options for oiled shorelines to OPS and UC;
3. Recommend shoreline cleanup endpoint standards to OPS and UC;
4. Monitor and evaluate shoreline treatment;
5. Provide inspection teams for segment sign off, and
6. Manage data collected from shoreline surveys.

Objectives

The objectives of the SCAT process for this incident are to:

1. Quickly collect data on shoreline oiling conditions using standard protocols and mechanisms;
2. Utilize shoreline oiling data to enhance and expedite shoreline treatment planning, decision-making, and response activities; and
3. Assure that a “net environmental benefit” (NEB) for an oiled shoreline is achieved by shoreline cleanup.
4. Ensure that impacts to Tribal and Cultural resources as well as endangered species and essential fish habitats are minimized.

Fundamental Principles:

The fundamental principles of the shoreline assessment surveys include:

1. A systematic assessment of all (oiled and non-oiled) shorelines in the affected area;
2. A division of shorelines into homogeneous geographic units or “segments”;
3. The use of a standard set of terms and definitions for documentation;
4. A survey team that is objective and trained; and
5. The timely provision of data and information for decision making and planning.

Health and Safety

The Site Safety Officer prepares a Site Safety Plan addressing safety issues related to the incident. The Site Safety Plan addresses the principal safety and health hazards from boat and water operations and shoreline assessment and cleanup operations. The site safety plan covers training, equipment safety, protective clothing and equipment, decontamination, and first aid and medical evacuation procedures to be used during the response.

Specific safety considerations for SCAT operations include the following:

1. Follow the Site Safety Plan.
2. Attend daily safety meetings regarding SCAT work.
3. Wear personal protective equipment.
4. Use personal flotation devices when transiting across water and review safe boating practices
5. Observe careful personal hygiene during the workday.
6. Watch for slips, trips, and falls.
7. Wear hearing protection when designated.
8. Watch for heat and cold stress.
9. Avoid interaction with wildlife.
10. Protect hands.
11. Operate equipment according to instructions.
12. Practice good housekeeping in work areas.

Organization, Staffing, and Schedule

Organization

The SCAT Coordinator is in charge of the Shoreline Cleanup Assessment Technique operations. The SCAT Coordinator reports directly to the Environment Unit Leader, but must maintain a close working relationship with the Operations Section, resource agencies, and other affected parties. In the field, SCAT teams may receive priorities and technical directions from the SCAT Coordinator via the SCAT Field Team Manager.

Staffing

The field SCAT teams will consist of up to 2 members (plus vessel/aircraft operators as needed), ideally with the following representation (one or more roles may be combined, or not be applicable):

1. Federal government representative (Mike Szumski, USFWS)
2. Ecologist/Biologist who can document the impacts of oil and recommend priorities, cleanup endpoints, and ecological constraints (Allison Kinney, BergerABAM)
3. Archeologist or cultural resource specialist who can advise on precautions and constraints to protect cultural resources, if needed (Alexander Gall, Archaeological Services LLC)

A total of 1 SCAT team has been assembled and deployed for the initial stages of this incident, including one team for ground surveys.

Field SCAT Team participants will be selected from representatives for industry; tribal state and federal agencies; and/or landowners to provide the primary expertise described above. SCAT Field Team members will be assigned for each team. A listing of the current organization (command & field) is outlined below.

The SCAT Data Manager is responsible for the maintenance of the SCAT data base and for the production of maps and tables as needed. The SCAT Data Manager may request the assignment of a SCAT Documentation specialist if the workload demands it.

Command Post

1. SCAT Coordinator/Field Team Manager - Allison Kinney
2. Scheduler/Logistics Coordinator – Allison Kinney in coordination with USFWS/NMFS
3. SCAT Data Manager/Data Entry – Allison Kinney
4. Shoreline Treatment Advisory Group – EPA, USFWS, HydroCon, BergerABAM, NWFF
5. Reconnaissance Ground Team 1 – SCAT ST1
6. Federal (USFWS)
7. RP – Rob Honsberger (Space Age Fuel representative)

8. Archeologist/Cultural Specialist (If needed) – NWFF Cultural Resources-trained Personnel (as necessary)
9. Wildlife Biologist/Ecologist – Allison Kinney
10. Tribal/Local Gov't reps – Contacted as necessary

Efforts will be made to minimize personnel substitutions and select team members who can stay with the SCAT operations, or to have a systematic schedule of alternates; people who see conditions change through time have a better frame of reference for assessing the success of cleanup operations.

Initial and subsequently new field team members will be "calibrated" by having them visit shorelines of differing morphology to review the agreed-upon shoreline descriptors and to confirm how oil impacts will be described throughout the response process. Currently deployed SCAT Teams have been calibrated.

Team Priority – Areas where heavy oiling has been noted or which are of specific ecological importance will be prioritized to maximize recovery opportunities and to reduce overall impacts.

Schedule

The schedule for SCAT Field Teams will change daily and be reflected in the 204s as well as on SCAT planning tools.

Identified segments and spot check locations will be surveyed daily and prioritized based on shoreline oiling conditions and potentially sensitive areas as identified daily. Areas where heavy oiling has been noted will be prioritized to maximize recovery opportunities as will sensitive areas. Areas will be surveyed during daylight hours, personnel may be relocated and identified segment surveys prioritizations may change to address changing conditions.

SCAT Survey Methods

Shoreline surveys will be conducted for this incident by different methods and at different scales depending upon the size of the affected area, character of the shoreline type, and level of detail that is required. The following table presents a summary of the survey methods that will be used for this incident, key objectives of the survey methods, and the purpose of each survey method.

Summary of Scat Survey Methods		
Survey Method	**Key Objectives**	**Purpose**
Systematic Ground Survey	Systematically document shoreline oiling conditions for selected segments with the affected area.	Systematically document oiling conditions for selected segments within the affected area and to complete SOS forms, generate sketch maps for each oiled segment and complete Shoreline Treatment Recommendations ("STR").
Spot Ground Survey	Systematically document shoreline oiling conditions for selected segments within the affected area.	Systematically document shoreline conditions after treatment and cleanup of segments within the affected area against the applicable treatment standards and complete shoreline oiling summary forms and generate sketch maps for those segments. Make recommendations for closure or further cleanup actions and

		complete Shoreline Inspection Reports (“SIRs”) for each segment for which “No Future Treatment” is being recommended.
Inspection survey	Evaluate effectiveness of treatment methods employed by Operations in meeting shoreline treatment standards.	Systematically document shoreline conditions after treatment and cleanup of segments within the affected area against the applicable treatment standards and complete shoreline oiling summary forms and generate sketch maps for those segments. Make recommendations for closure or further cleanup actions and complete Shoreline Inspection Reports (“SIRs”) for each segment for which “No Future Treatment” is being recommended.

Shoreline Segmentation Strategy: Homogenous areas/segments of the shoreline have been identified across the project site. Survey segments and spot check locations have been identified to document representative and/or priority areas of the project site and allow reconnaissance teams to thoroughly survey the shoreline, while limiting excessive/unnecessary/arduous data collection requirements.

Field Documentation and Information Transfer

Field documentation will consist, where possible, exclusively of standardized forms. Examples include the shoreline oiling summary (SOS) and shoreline treatment recommendation (STR) forms.

Ground Surveys

The SCAT Field Team Manager and each Field Teams are responsible for ensuring that the following tasks and field documentation are completed.

- Complete SOS Form
- Complete STR Form (if necessary)
- GPS documentation of any segment(s) if oil is observed
- GPS coordinates of segment endpoints and specific features
- Digital photographs and log date/time/location if oil or any indication of fuel impact (e.g. dead or fuel impacted wildlife, etc.) is observed
- Dig pits/trenches if subsurface oil is suspected (if necessary)

SCAT forms appropriate to the spill conditions will be selected.

The completed field documentation (SOSs, STRs, GPS data, sketches and photos) from the ground survey teams are to be provided to the Field Team Manager (or Data Manger). This documentation shall be inspected at the command post for QA/QC on the same day (whenever feasible) as the survey to ensure that any necessary revisions are made prior to the surveys of the next day.

All GPS units and digital cameras will be surrendered to SCAT Data Manger immediately upon return to the Command Post for downloading. The Data Manager will ensure that device times are synchronized and that all waypoints, tracklogs, and digital pictures are erased from each device prior to being redeployed with Field Teams.

In order to facilitate planning, the Team Members will notify the SCAT Field Team Manager on a daily basis if any segments are identified that will require Operations mobilization.

Command Post Data Management and Results

Data QA/QC

Data from SCAT field surveys is used to plan cleanup activities for the subsequent shoreline cleanup operations.

The SCAT Data Manager receives and logs incoming SCAT field forms, sketches, and other information (films, videotapes, etc.) and reviews the field information. The review involves a quick check to make sure that all sections of the forms have been completed and that the information appears reasonable and consistent. Any questions regarding missing information or apparent inconsistencies are discussed with the field team members before the next field assignment. After the quality control is complete, forms are copied and distributed as needed and key information is transferred to tables or computer data files.

Data Outputs

In general, the types of data, graphics, and tables that will be generated from the SCAT database may include:

- Maps of shoreline segments and soil/sediment types
- Oiling conditions
- Surface oil volumes, changes in volume through time
- SCAT field survey status
- Treatment recommendations
- Cleanup treatment status
- Lengths of oiled shoreline (by oil rating and/or shoreline type)
- Lengths treated (by oil rating and/or treatment method)
- Area surveyed

Record Keeping

Original SCAT field forms, sketches, and other information (photos, videotapes, etc.) and data, graphics, and tables generated during the incident will be provided by the SCAT Data Manager to the Documentation Section for retention. Only copies of these records will be distributed for use by stakeholders (i.e., RP, USCG, EPA, state agencies, etc.).

Spill Cleanup Endpoints Standards

All spills have a point at which active cleanup and removal gives way to the natural degradation of the oil. In many cases, this termination point is developed through a process lead by the SCAT Coordinator (Cleanup Endpoint Stakeholder Group) and formalized by the Unified Command. In most cases, the endpoint will be assumed to have been reached when worker safety would be compromised or the remaining oil presents less of a risk to the community or the resources than the treatment methods available.

The cleanup endpoints for this spill are still under development.

After the Operations Division Supervisor or Shoreline Supervisor considers that cleanup in a segment has been completed, the segment will be inspected by a Sign-Off team, that will (a) determine whether the cleanup criteria have been met and (b) make a recommendation to the Unified Command regarding that segment. At the time of the inspection, the land manager or representative will accompany the team and a segment inspection report (SIR) form will be completed. The Land Manager or representative may add notes in the “COMMENTS” text block on the SIR.

If the SCAT team (in consultation with the land manager) determines that no oil is present in the segment or that the cleanup has met the endpoint criteria, then the members of the SCAT team representing the UC will sign the SIR and forward a No Further Action recommendation to the UC for approval. Note that a determination that cleanup endpoints have been reached does not indicate that the segment is necessarily recovered or restored under the definition of the NRDA process.

If the SCAT team determines that a segment fails to meet the cleanup criteria the team will indicate this on the SIR. They will specify where work is still required in order for the segment to pass inspection and will forward the form to the Operations Section Chief via the SCAT Coordinator and the EUL.

The SCAT signoff process is intended to be a consensus-based team assessment. If, however, the team members are not in agreement regarding whether the endpoint criteria are met, then a sheet listing the reasons for disagreement is attached to the SIR and forwarded to the UC for resolution.

Unified Command Approval:

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Jeffrey Fowlow, EPA, FOSC Date

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Jamie Collins, ODEQ, SOSC Date

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Rob Honsberger, RPIC Date